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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,615	03/06/2007	Walter Dennis Robertson III	35015/044US	9787

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THE OLLILA LAW GROUP LLC
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EXAMINER	
HOGAN, JAMES SEAN	
ART UNIT	PAPER NUMBER
3752	
MAIL DATE	DELIVERY MODE
08/28/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/573,615	ROBERTSON III ET AL.	
	Examiner	Art Unit	
	JAMES S. HOGAN	3752	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *23 June 2008*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-11,13-17,19 and 20* is/are rejected.

7)☒ Claim(s) *12 and 18* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *7/24/08*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed June 23, 2008 have been fully considered but they are not persuasive. The exception to the art of Nickerson et al is moot in light of the obviousness that can be associated when two components perform the same task as a single component. Further, in response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, there is sufficient knowledge generally available to lend credence to the use of the cited art.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 3, 5, 6, 8, 9, 11, 13, 17, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,151,178 to Nickerson et al.

As per claims 1 11 and 17, Nickerson et al discloses (see Figure 3) an orifice member (212) defining a first surface, the orifice member having an inlet (at (214)) and an outlet (at (212)), a plunger (combined, (200) and (206)), a pole (30) and coil (28) which energized to move the plunger, the plunger being movable relative to the orifice member; a first guide spring (202) situated between the orifice member and the plunger and having a portion attached to a first end of the plunger, the first guide spring defining a second surface, the second surface being sealable against the first surface to prevent fluid flow between the inlet and the outlet. Nickerson et al does not teach the plunger and spring attached to one another, and although it is taught away from such an attachment, the attachment of two items is obvious to one having ordinary skill in the art at the time the invention was made, since it has been held that forming in once piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art. See *Howard v. Detroit Stove Works*, 150 U.S. 164 (1893).

3. As per claims 2 and 3, Nickerson et al does not teach an attachment means for the plunger to the spring, but is shown (as per claim 3), attached to the plunger opposite the opening (at (212)). However, spot welding as an assembly procedure is notoriously well known in the art and it would have been obvious to one having ordinary skill in the art at the time the invention was made to have spot welded the plunger to the spring in order to attach the two components together in a cost-effective manner known to be a timely procedure.

4. As per claim 5, Nickerson et al discloses a valve body (204) and the spring is determined to be a seam member, however, the embodiment in Figure 2 also discloses a seal member (114).

5. As per claim 6, Nickerson et al does not teach a material preference for the spring/seal member, however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the spring/seal of nickel since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. See *in re Leshin*, 125 USPQ 416.

6. As per claim 8, Nickerson et al discloses the valve to be normally closed. (Col. 3, lines 32-34)

7. As per claim 9, Nickerson et al discloses the valve to be normally closed. (Col. 3, lines 32-34), not normally open, however, as valves of both state are notoriously well known in the art, it would have been obvious to one having ordinary skill in the art at the time the invention was made to have valve normally open.

8. As per claim 13 and 19, the plunger is moved to the open position when the coil in energized.

9. As per claim 20, the guide spring of Nickerson urges the plunger in the closed position.

10. Claims 4, 10, and 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 5,151,178 to Nickerson et al in view of U.S. Patent No. 4,635,683 to Neilson.

The rejection of claims 1 and 11 above serve as the basis for the following.

As per claims 4, 10, 14-16, Nickerson et al does not teach a second guide spring attached to the second end (aka, proximal end) of the plunger. Neilson teaches a solenoid valve having a plunger (16) having flat guide springs ((36) and (32)) on both ends of the plunger, the second spring biasing a plunger into the closed position. Therefore, it would have been obvious to one having ordinary skill in the art to have provided the device of Nickerson et al with a flat guide springs on the second end of the plunger as suggested by Neilson. Doing so would provide additional valve member responsiveness and because (a) the Nickerson et al reference and the Neilson reference are *known work in one of field of endeavor*, (b) such modification is merely the use of known technique to improve a similar device by Applicant and (c) such modification, i.e. choosing from a finite number of predictable solutions, is not of innovation but of ordinary skill and common sense. *KSR, International Co. v. Teleflex Inc., 550 U.S. (2007).*

Allowable Subject Matter

11. Claims 12 and 18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

12. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JAMES S. HOGAN whose telephone number is (571)272-4902. The examiner can normally be reached on Mon-Fri, 6:00a-3:00p EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Len Tran can be reached on (571)272-1184. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/J. S. H./
Examiner, Art Unit 3752

/Len Tran/
Supervisory Patent Examiner, Art Unit 3752